which may lead to partially undesired product scenarios and, in particular, to the unnecessary use of network resources, and to substantial additional costs for net operators and end customers.

- Network services, such as call forwarding, depend on data records that are separately assigned to each end device within the network. Since these data records are not automatically synchronized, the result is a different call behavior depending on which particular end device is being used and/or a substantial cost for the user to manually synchronize the end device data records. Furthermore, the user's selection options for the settings of the network services must be restricted in order to guarantee the correct network behavior during the delivery of parallel calls.

EP 0 711 090 A2 discloses a method to control a configuration of telecommunication end devices comprising an arrangement of two or more end devices (multiple-device configuration) in a public telecommunication network. A number of subscriber identification chips share one single subscriber identification number.

US 5 708 809 A describes a method to update the program structure of a modular communication facility, which consists of several modules connected to each other through a bus. Upon the commencement of operation or a change in the configuration, the program structure is automatically updated separately in each module.

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EP 0 740 482 A1 relates to a telephone management system in the form of a separate processor set up with the subscriber, which enables the connection of a number of subscriber's end devices, such as cellular phone, cordless telephone, answering machine, etc. When an incoming call arrives, the processor forwards it to the momentarily "active" and device.

WO 01 0708 A1 discloses an automatic call distribution system similar to the one of EP 0 740 482 A1 with the difference that, here, the distribution of calls to connected end devices is performed by a network element of the communication network.

Therefore, the technical task of the present invention is to propose a method and a system configuration that will guarantee a network resource-saving control of end devices arrayed in a multiple-device configuration and, at the same time, to provide the user with a central control for all system behavior.

This technical task is resolved by using a special control circuit and the associated process according to the characteristics of the invention claims, the disclosure of which we herewith make reference.

Advantages of the method

- Optimal use of network resources for the design of telecommunication connections, especially

1. A method to control a configuration containing the array of two or more telecommunication end devices (B10, B20, B30) (multiple-device configuration) in a public telecommunication network, characterized in that upon the activation of changes in the features of the public telecommunications network assigned to a first end device (B10) or rather to an identification chip connected to the first end device, these changes in the features are activated, at the same time or with a temporal delay, also in the other end devices (B20, B30) or rather in the identification chips connected to the particular end devices of the multiple-device configuration, wherein an intelligent call control (B) polls a mobility / profile database (Ca) for the profile of the first end device (B10) or rather of an identification chip connected to the first end device and, at least partially, uses it to control the features during the call setup to at least one more end device (B20, B30).

2. A method to optimize the use of resources of a public telecommunication network during the switching of one or more parallel calls to one or more end devices (B10, B20, B30) of a number of end devices that form a multiple-device configuration, characterized in that before a call is delivered, where a certain occupancy of resources depending on the

type of the desired call arises, an intelligent call control (B) of the public telecommunications network determines the system statuses of the end devices called or rather of the identification chips connected to the relevant end devices and of the switching facilities involved (D1, D2, D3) by polling the databases of the end devices or rather of the identification chips connected to the corresponding end devices and/or the mobility / profile databases (Ca, Cb, Cc) assigned to the switching facilities involved (D1, D2, D3), whereupon – based on the data on the system statuses of the end devices called (B10, B20, B30) or rather the identification chips connected to the end devices – an optimal call delivery is performed, wherein only call attempts promising success are initiated with the associated occupancy of the corresponding network resources.

3. Method according to claim 2, characterized in that the system statuses of the end devices called (B10, B20, B30) or rather of the identification chips connected to the end devices are determined before the actual call delivery.

4. The method according to one of claims 2 or 3, characterized in that in case it can be derived from the data on the system status that an end device (B10, B20, B30) is free to receive a call, the call is first delivered and that in case the connection is not used (for example, technically not reachable, the subscribed does not respond, the subscriber rejects the call), the occupied line is released again up to the origin of the connection.

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5. The method according to claim 4, characterized in that in case the call has not been accepted, using the previously determined settings of the end devices (B10, B20, B30) or rather of the pertinent identification chips connected to the corresponding end devices, a direct connection is established to the desired call forwarding target (E).

6. The method according to one of claims 2 to 5, characterized in that the call forwarding is initiated in the original switching facility (A) by a central control (B) based on the data from the evaluation of the system statues of all end devices called (B10, B20, B30) or rather of the identification chips connected to the pertinent end devices.

7. The method according to one of the preceding claims 2 to 6, characterized in that the profile data of the mobility / profile database (Ca) of the identification chip connected to the first end device (B10) is synchronized with the profile data of the mobility / profile databases (Cb, Cc) of the identification chips connected to the other end devices (B20, B30).

8. A method according to claim 2, characterized in that during the forwarding of a call to an end device (B10, B20, B30) a certain occupancy of resources required to complete the call results from the type of the desired call, wherein before the call is delivered, an intelligent call control (B) determines the system status of at least one end device called (B10, B20, B30) or rather of the identification chip connected to the at least one end device and/or of the switching facility or facilities involved (D1, D2, D3).

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9. The method according to claim 8, characterized in that the system status of at least one end device (B10, B20, B30) and/or of the at least one switching facility (D1, D2, D3) is determined by polling the mobility / profile databases (Ca, Cb, Cc) of the at least one end device or rather of the identification chip connected to the at least one end device and/or of the at least one switching facility involved.

10. The method according to one of claims 8 or 9, characterized in that an optimal call delivery is derived from the data on the system status of at least one end device (B10, B20, B30) called, or rather of the identification chip connected to the at least one end device in such a manner that only call attempts that promise success with the associated occupancy of the corresponding network resources are initiated.

11. The method according to one of clams 8 to 10, characterized in that, using the previously determined information, any call attempts expected to fail are eliminated before the actual call delivery.

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12. The method according to one of claims 8 to 11, characterized in that in case it can be derived from the data on the system status that at least one end device (B10, B20, B30) is free to receive a call, the call is first delivered and that in case the connection is not used (for example, technically not reachable, the subscribed does not respond, the subscriber rejects the call), the occupied line is released again up to the origin of the connection.

13. The method according to claim 12, characterized in that in case the call has not been accepted, using the previously determined settings of the at least one end device (B10, B20, B30) or rather of the pertinent identification chips connected to the at least one end device, a direct connection is established to the desired call forwarding target (E).

14. The method according to one of claims 8 to 13, characterized in that the call forwarding is initiated in the original switching facility (A) by at least one central control (B) based on the data from the evaluation of the system status of at least one end device called (B10, B20, B30) or rather of the identification chip connected to the at least one pertinent end device.

15. The method according to one of the preceding claims 8 to 14, characterized in that the profile data of the mobility / profile database (Ca) of the identification chip connected to the at least one end device (B10) is synchronized with the profile data of the mobility / profile databases (Cb, Cc) of other identification chips connected to the other end devices (B20, B30) of the subscriber.

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16. A system in a public telecommunications network for an optimal control of the call delivery and/or call forwarding in a multiple-device configuration that consists of at least two end devices (B10, B20, B30) of a telecommunications system, characterized in that a memory unit (Ca, Cb, Cc) is provided, in which the system statuses of the end devices involved in the multiple-device configuration (B10, B20, B30) are stored, at least partially, and that intelligent process control (B) is provided that is connected to the indicated memory unit (Ca, Cb, Cc) and to the units (A) to be controlled.

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